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# EXHIBIT A

## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

INGENIO, FILIALE DE LOTO-QUEBEC, INC.,

Plaintiff,

٧.

Case No. 01-1532 (KAJ)

GAMELOGIC, INC., and SCIENTIFIC GAMES CORPORATION,

Defendants.

## EXPERT REPORT OF CHRISTOPHER L. BRANDIN

January 15, 2006

#### I. **SUMMARY OF OPINIONS**

It is my opinion that the asserted claims of U.S. Patent No. 5,569,082 and U.S. Patent No. 5,709,603 are invalid. Among their defects, the asserted claims are invalid in light of the prior art, certain claims are indefinite, and the patents do not provide enough detail to enable the asserted claims. It is also my opinion that certain prior art known to the patentee and not disclosed to the Patent and Trademark Office is highly material to the patents-in-suit.

If asked to do so, I am prepared to express these opinions at the trial of this action. My opinions, and the information that provides the basis and reasons for them, are further discussed below.

#### H. ASSIGNMENT

At the request of Bingham McCutchen LLP, counsel for defendant GameLogic, Inc. ("GameLogic"), I have investigated the validity of U.S. Patent No. 5,569,082 ("the '082 patent") and U.S. Patent No. 5,709,603 ("the '603 patent"), analyzed the materiality of certain prior art references to the '082 patent, and prepared this report.

TAEUS International Corp. is to be compensated for my time working on this matter at a rate of \$300 per hour for non-testifying time, and \$400 per hour for time spent testifying. TAEUS's compensation is not dependent in any way on the outcome of my investigation, or the content of this report.

In conducting my investigation and preparing this report, I have examined the documents listed at Exhibit B. I have also consulted with counsel regarding the applicable claim construction, patent validity and materiality standards. In addition, I have relied upon my experience and education.

#### BACKGROUND III.

My most recent curriculum vitae and details regarding my background are attached at Exhibit A.

#### THE PATENTS-IN-SUIT IV.

Plaintiff Ingenio, filiale de Loto-Quebec, Inc. ("Plaintiff" or "Ingenio") alleges

Perry Kaye is the named inventor of the patents-in-suit, and both are titled "Personal Computer Lottery Game." The application for the '082 patent was filed on April 6, 1995, and the patent issued on October 26 1996. The application for the '603 patent was filed on October 25, 1996, and the patent issued on January 20, 1998. The '603 patent is a continuationin-part of the '082 patent. I understand that Ingenio is the assignee of both patents.

The '082 patent abstract substantially describes the claimed invention of independent method claim 1 and independent apparatus claim 10:

> A method and system for playing a player interactive lottery type game includes a gaming piece which includes a predetermined code having data indicating whether the player wins or loses the game, the data being unrecognizable to the player, such that the player does not know the outcome of the game prior to play of the game. The code is entered by the player into a processor. The processor presents a game of chance to the player on a display for interactive play by the player, and the player controls game play by inputting game parameters to the processor. The processor controls the outcome of the game of chance played by the player based upon the code entered by the player. A display provides an indication to the player of a game win or a game loss based upon the code.

'082 Patent at Abstract. See also id. at Col. 10, line 66 - Col. 11, line 17 (claim 1), and Col. 12, lines 4-20 (claim 10).

The '603 patent abstract is nearly identical to the '082 patent abstract. In the '082 patent, the second sentence of the abstract reads: "The code is entered by the player into a processor." '082 Patent at Abstract. In the '603 patent abstract, that sentence is replaced by: "The code is stored on the gaming piece in a memory device. The gaming piece is reusable with different codes. The code is read by a processor." '603 Patent at Abstract. This difference is also reflected in claim 1, the only asserted '603 patent claim. Id. at Col. 16, line 6. Thus, where the '082 patent requires that a player enter a code into a computer in order to play a game, the '603 patent requires that the processor read a code from a gaming piece in order for the player to

play a game.

Ingenio specifically accuses GameLogic of infringing claims 1, 4, 6, 8, 9, 10, 13,

15, 16, and 17 of the '082 patent, and claim 1 of the '603 patent (collectively, "the asserted claims"). See Ingenio's response to Interrogatory No. 1.

The asserted claims of the '082 patent recite:

1. A method for playing a player lottery game comprising the step [sic] of:

acquiring by a player a game piece, the gaming piece including a code which includes data indicating whether the player wins or loses the lottery game and an amusement game, the data being unrecognizable to the player, such that the player does not know whether the player will win or lose the game prior to play of the amusement game;

entering the code by the player into a processor prior to amusement game play;

the processor generating the amusement game on a display for play by the player, the player controlling game play by inputting game parameters to the processor;

the processor controlling whether the player will win or lose the amusement game based upon the code entered by the player; and

providing on a display an indication to the player of the amusement game win or loss based upon the code.

- 4. The method of claim 1 wherein the gaming piece includes paper media for storing the code.
- 6. The method of claim 1 wherein the amusement game includes a card game.
- 8. The method of claim 1 wherein the step of entering the code into a processor includes a processor within a computing device.
- 9. The method of claim 1 wherein the step of entering the code into a processor includes a processor within an on-line subscription service.

10. A lottery type game comprising:

a gaming piece, said gaming piece including a code which includes data indicating whether a player wins or loses the lottery game and an amusement game, said data being unrecognizable to the player, such that the player does not know whether the player will win or lose the games prior to play of the amusement game; a processor for receiving said code input by the player prior to amusement game play;

said processor generating the amusement game on a display for play by the player,

said processor determining whether the player will win or lose the amusement game based upon said code; and

a display for providing an indication to the player of the amusement game win or loss based upon said code.

13. The lottery type game of claim 10 wherein said gaming piece includes a paper media for storing said code.

15. The lottery type game of claim 10 wherein said amusement game includes a card game.

16. The lottery type game of claim 10 wherein said processor includes a computing device.

17. The lottery type game of claim 10 wherein said processor includes a processor within an on-line subscription service.

'082 Patent, Col. 10, line 66 - Col. 12, line 37. The asserted claim of the '603 patent recites:

1. A method for playing a lottery type game comprising the steps of:

acquiring by a player a gaming piece, the gaming piece including a code which includes data indicating whether the player wins or loses the lottery type game and an amusement game, the data being unrecognizable to the player, such that the player does not know whether the player will win or lose the games prior to play of the amusement game:

reading the code by a processor;

the processor generating the amusement game on a display for play by the player;

the processor controlling whether the player will win or lose the amusement game based upon the code; and

providing on the display an indication to the player of the amusement game win or game loss based upon the code.

'603 Patent, Col. 15, line 64 - Col. 16, line 14.

#### ٧. BACKGROUND OF THE TECHNOLOGY

Computer-based gambling machines have been on the market since the 1970's. Up until the advent of the Internet and the World Wide Web, a majority of these machines substantially emulated the behavior of mechanical gambling machines that preceded them, such as slot machines; or they emulated games that had heretofore not been mechanized, such as poker, blackjack and other games. In the 1990's, the Internet rapidly became ubiquitous, supplanting other means of delivering content and sharing information. The gambling industry, like everybody else, was keen to take advantage of the Internet in order to increase business.

By this time, many states (and foreign countries) had adopted lotteries as a legal form of gambling; in some cases it was the only legal form of gambling available. "Scratch Tickets" became a particularly popular form of lottery game with tickets available at convenience stores, gas stations, and the like. Generally, with this form of lottery game the determination of winning tickets is made in advance, the player cannot do anything to affect the outcome of the game, and indication of a win or loss is unambiguous and easy to see.

Regulations impose severe limitations on gambling over the Internet. Generally, one cannot make a wager or receive winnings over the Internet partially because enforcing age limits, etc. can't be done over the Internet. Another challenge facing providers of computer gambling related products is that scratch ticket lotteries, when emulated on a computer, are dull and less convenient than scratching tickets. Consequently, companies started to develop more entertaining games that tie into lottery games in indirect ways to make it a more interactive experience for the player.

#### VI. **CLAIM TERM ANALYSIS**

It is my understanding that any analysis of whether a patent is valid or infringed necessarily depends on the meaning of the claim terms. It is also my understanding that claim terms are to be given their ordinary meaning as understood by a person of ordinary skill in the relevant art who has read the claim term in the context of both the claim in which it appears and the entire patent, including the specification. It is my further understanding that this presumption of ordinary meaning can be overcome where the prosecution history or specification shows that the applicant redefined or limited a claim term.

In reaching my opinions, I have examined the patents-in-suit and relevant prior art from the perspective of one of ordinary skill in this area of technology at the time their applications were filed. I consider a person to be one of ordinary skill of the asserted patents if that person has a basic understanding of encryption methods and limitations, mathematical coding methods and limitations, computers, and computer programming, with a bachelors of science in computer engineering or a minimum of five years of industry experience in computer programming or software development.

It is my understanding that to date, the Court has not construed the terms in the asserted claims, and that both Ingenio and GameLogic have stated their proposed constructions of certain terms. It is my understanding that the parties dispute the following claim terms, to the extent that one party (but not always both) has offered a proposed construction:

- · "gaming piece";
- "gaming piece including a code";
- "a code which includes data indicating whether the player wins or loses the lottery game and an amusement game";
- "lottery game";
- "amusement game"; and
- "reading the code by a processor."

The first five disputed claim terms are part of a larger phrase which appears in all

three asserted independent claims: "the gaming piece including a code which includes data indicating whether the player wins or loses the lottery game and an amusement game." See '082 Patent, Col. 10, line 67 - Col. 11, line 6 (claim 1), and Col. 12, lines 5-10 (claim 10). The last term appears only in claim 1 of the '603 patent. '603 Patent, Col. 16, line 6.

Because the Court has not yet construed the claims, I have independently evaluated the meaning of the claims from the perspective of a person of ordinary skill in the art. I have reviewed Ingenio's Responses to GameLogic's Interrogatory No. 6, and do not agree with Ingenio's interpretation of the claims. I have also reviewed GameLogic's response to Ingenio's Interrogatory No. 2, and have found that the language and context of the claims, the specification of the patents, and their prosecution histories, support GameLogic's interpretation of the claims.

In the absence of a definitive claim construction from the Court, I have analyzed the validity of the patents-in-suit based on both my own reading of the claims (which is consistent with GameLogic's previously proposed constructions) and Ingenio's interpretation of the claims (notwithstanding my belief that it is incorrect).

#### A. "Gaming piece"

Game pieces have been around as long as gaming itself. Paper tickets, chips, tokens, and coins are all well-known examples. This is consistent with the specific definition of "gaming piece" in the 603 patent:

> As used herein, the terms 'Game Medium', 'game media' and 'gaming piece' include, but are not limited to, a paper ticket, or a token or a casino chip simulating a coin. Characteristic of all gaming pieces utilized with the present invention are that the piece includes the Destiny Codes stored thereon, either by printing, magnetics, or an integrated circuit memory device.

'603 patent, Col. 3, lines 31-38. Given the well-known meaning of the term, and the specific definition in the patent specification, a person of ordinary skill in the art would understand that "gaming piece" claimed in the patents-in-suit is a paper ticket, token or casino chip simulating a coin.

В. "the gaming piece including a code which includes data indicating whether the player wins or loses a lottery type game and an amusement game, the data being unrecognizable to the player, such that the player does not know whether the player will win or lose the game prior to the play of the amusement game"

One of ordinary skill would understand that this claim element is directed to a gaming piece that stores the code in or on the gaming piece. The code includes data that states whether a player wins or loses both the lottery game and the separate amusement game. Further, based on the patent's disclosure, "the data being unrecognizable to the player" means the data is somehow encrypted and/or obfuscated.

In its interrogatory responses, Ingenio attempts to construe the meaning of "code which includes data indicating whether the player wins or loses" to incorporate data which "points" to data indicating win/loss contained elsewhere rather than that indication being intrinsic to the code itself. See Ingenio response to Interrogatory No. 6. Given the language in this claim, the patent's disclosures, and the file history of the '082 patent, Ingeino's proposed construction is untenable.

In matters of claim interpretation, I understand, the preferred meaning of a term is the one given in the patent itself. The first paragraph in the "Description of the Preferred Embodiments" of the '082 patent reads as follows:

> FIG. 1 is a block diagram of the basic components of the present system. Block 10 shows that the start of the system requires a secure system for generating and controlling and tracking encrypted symbolic codes that signify the outcome of the particular game of chance to be played by the player. These codes are called "Destiny Codes" because their primary function is to store the outcome of the game of chance. The codes can, in addition, store other data that assists in the playing of the game, the tracking of the game, the security of the game, or any other data that may enhance the game or its operation. If the player knew the procedure to decode the Destiny Code, the player would be able to determine if the Destiny Code contained a winning chance or a losing chance. The total and actual result of the game is encoded in the Destiny Code. By decoding the Destiny Code one reveals whether or not a game was a winner or a loser, and if it was a winner, the prize won.

'082 patent, Col. 2, line 54 – Col. 3, line 3.

The so-called "Destiny Codes" of the patents-in-suit are clearly defined as a code containing the win or loss outcome. Phrases such as "their primary function is to store the outcome," and "[I]f the player knew the procedure to decode the Destiny Code, the player would be able to determine if the Destiny Code contained a winning chance or a losing chance," and "[t]he total and actual result of the game is encoded in the Destiny Code," and "[b]y decoding the Destiny Code one reveals whether or not a game was a winner or a loser" describe in unambiguous terms that Destiny Codes contain all the data necessary to determine win or loss based on "decoding" that data as opposed to looking up additional data. Furthermore, the patent goes to considerable lengths to explain that the data is encoded in such a way that if the player knew the procedure to decode the Destiny Code, he would know whether he will win or lose.

Perhaps the most compelling argument for interpreting the claim language as I have is that the inventor and his representatives themselves drew the same distinction in correspondence with the patent examiner during the prosecution of the '082 patent. When the patent was first filed all claims were rejected on various grounds. The examiner cited the Clapper, Jr. patent (U.S. Patent No. 5,377,975), among others, as invalidating prior art. In response, the patentee argued:

> None of the cited references disclose or suggest a game or method of playing a game in which a code entered by the player prior to game play controls the outcome, win or loss, of the game. The Clapper, Jr. reference discloses the use of a bar code which merely identifies indicia printed on a strip. The bar code is used to display the strip indicia to a game player. The printed indicia on the strip determines whether the player wins or loses the game, and not the code.

See GL 00134.

In other words, the inventor clearly distinguished between data containing information that determines win or loss (as in his claimed invention) and data containing a reference to data containing information that determines win or loss that is located elsewhere (as in Clapper, Jr.).

Thus, my interpretation that this element means that there is a code which

contains data directly indicating win/loss of a lottery and an amusement game; that the win/loss data is encrypted and/or encoded in some way that renders it unrecognizable to the player; and that the game software decodes or decrypts that data, is fully supported by the intrinsic evidence.

#### C. "Amusement game" and "Lottery game"

An "amusement game," as used in the patents-in-suit, is a game played purely for player enjoyment. '082 Patent at Col. 3, lines 25-27 (the amusement game "is purely for player enjoyment, and is used to give the feel of a completely random game of chance"). The specification refers to the "lottery game" of the claims as the "actual game." According to the specification, "[t]he purpose of the actual game is to display, in a pleasing fashion, the actual prize that is stored in the Destiny Code and to display the game results as though there is a completely random element." Id. at Col. 3, lines 34-37. Therefore, "lottery game," as used in the body of the patent claims, refers to a game whose purpose is to display the actual prize that is stored in the code and to display those results as if they were random.

#### D. "Reading the code by a processor"

Many of the claim terms of the '082 patent also appear in the '603 patent, and the constructions addressed above apply equally to the '603 patent. Claim I of the '603 patent differs from the '082 patent claims, however, in that rather than the player "entering the code," a processor "read[s] the code." A "processor," such as a microchip, is contained within a computer. If data needs to be transferred to a computer (or processor, or gaming machine, or any device for that matter), there are three basic ways to achieve this: (1) somebody inputs the data, e.g., typing it, (2) the data is transferred through a telecommunications means e.g. telephone or modem, or (3) the device reads the data from something e.g. coin with a memory chip as in the '603 patent.

The ordinary meaning of "reading," as used in claim 1 of the '603 patent ("reading the code by a processor"), means to actively examine and grasp the meaning of the

The limitation "the player controlling game play by inputting game parameters to the processor" found in claim 1 of the '082 is not present in either the '603 patent or in claim 10 of the '082 patent.

code. This differs than Plaintiff's proposed definition of "read," which is "to input data from a storage device, a data medium, or any other source." I find Plaintiff's proposed construction to be contrary to the normal usage of the term "read" in the art and contrary to the context of the '603 patent. The new matter of the '603 patent describes at length the use of "casino chips or tokens containing Destiny Codes to allow a player to simulate wagering games with cash." '603 patent at Col. 11, lines 13-16. The chip or token can be inserted in a slot-machine like receptacle, and the machine processor "reads the Destiny Code stored in the memory device contained on the gaming piece." Id. at Col. 12, lines 2-7 (emphasis added).

Ingenio's proposed definition is the opposite of what is disclosed in the specification. Whereas the specification describes the processor as actively extracting the Destiny Code from the game piece memory, Ingenio's definition would merely require the processor to be a passive recipient when the code is "input" from a source. I therefore view Ingenio's proposed construction of "reading the code by a processor" as an incorrect interpretation of the claim.

#### VALIDITY ANALYSIS VII.

### Relevant legal principles

It is my understanding that a patent claim is invalid if it does not describe a genuinely new invention. As stated in the portions of the Patent Act quoted below, I understand that a claim is invalid as anticipated if a single prior art reference discloses all of the elements of the claim, and a claim may be invalid as obvious in light of a combination of multiple prior art references.

A person shall be entitled to an invention unless—

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States[.]

35 U.S.C. §§ 102 (a) & (b).

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person of ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

35 U.S.C. § 103(a). It is my understanding that in order for a claim to be obvious in light of a combination of references, there must have been some motivation for a person of skill in the art to combine the prior art references to produce the claimed invention.

Further, it is my understanding that for a patent to be valid, it must disclose enough information to allow one of ordinary skill in the art to make and use the claimed invention without undue experimentation. 35 U.S.C. § 112, ¶ 1.

It is also my understanding that a patent claim is invalid if it is ambiguous. 35 U.S.C. § 112, ¶ 2. Thus, I understand that a patent claim is invalid if a person of ordinary skill in the art would be forced to guess at its meaning.

#### В. Validity Analysis of the '082 Patent

#### 1. Anticipation and Obviousness.

Each and every element of each asserted claim was well-known prior to the '082 patent. Although it is my understanding that a patent may properly claim a novel combination of previously-known elements, the combination claimed by the '082 patent is not novel. Rather, the asserted claims of the '082 patent are either anticipated or would have been obvious to a person having ordinary skill in the pertinent art at the time of the purported invention.

As demonstrated in the claim charts below, U.S. Patent No. 5,373,440, L. Cohen, et al., "Promotional Game Method and Apparatus Therefor" and U.S. Patent No. 5,324,035, Morris, et al., "Video Gaming System with Fixed Pool of Winning Plays and Global Pool Access" anticipate the '082 patent. The Cohen and Morris patents contain disclosures sufficient to enable one of ordinary skill in the art to practice the claims of the '082 patent.

In addition, if the trier of fact were to find that either Cohen or Morris are missing any limitation(s) of the asserted claims of the '082 patent, then the combined teachings of at least the following prior art references renders the claims of the '082 patent obvious:

- U.S. Patent No. 5,377,975, R. Clapper Jr., "Electronic Gaming Apparatus and Method";
- U.S. Patent No. 5,373,440, L. Cohen, et al., "Promotional Game Method and Apparatus Therefor";
- International App. No. PCT/F190/00254, Raha-Au-Tomaattiyhdistys, "A Game for Playing Apparatus";
- U.S. Patent No. 5,324,035, Morris, et al., "Video Gaming System with Fixed Pool of Winning Plays and Global Pool Access;"
- U.S. Patent No. 4,922,522, J. Scanlon, "Telecommunications Access to Lottery Systems";
- U.S. Patent No. 4,494,197, S. Troy, et al., "Automatic Lottery System"; and
- U.S. Patent No. 4,689,742, S. Troy, et al., "Automatic Lottery System."

All of these prior art references relate to amusement and/or lottery games and data exchange for those games that yields a more enjoyable and interactive experience for the player, while maintaining the integrity of the game. Therefore, one of ordinary skill would be motivated to combine features of any two of the prior art documents to obtain a desired level for these features. The reason, suggestion, and motivation to combine are found explicitly or implicitly:

- in the prior art references themselves;
- in the knowledge of those of ordinary skill in the art that certain references, or disclosures in those references, are of special interest or importance in the field; or
- from the nature of the problem to be solved leading those skilled in the art to look to references relating to possible solutions to that problem.

The claim chart below demonstrates that the Cohen patent anticipates the asserted claims of the '082 patent under my interpretation of the claims. Should the trier of fact find that the Cohen reference is missing any element(s) of the asserted claims, I have provided citations from related prior art, which when combined with Cohen would render the claims obvious.

| U.S. Patent No. 5,569,082   | Prior Art References  |
|---|---|
| 1. A method for playing a player lottery  |   |
| game comprising the step of:  |   |
| acquiring by a player a game piece, the gaming piece including a code which includes data indicating whether the player wins or loses the lottery game and an amusement game, the data being unrecognizable to the player, such that the player does not know whether the player will win or lose the game prior to play of the amusement game; | Cohen, et al. teaches a method whereby ('440, col. 3, lines 6-9) "each patron who wishes to play the promotional game in an effort to win prizes obtains a game card by registering at a suitable service desk"; and that ('440, col. 3, lines 39-49) "certain selection criteria can be established so that the formation of a winning combination will be less than entirely random although it will still appear to be random to the playing patron. For example, winners could be established based on preselected game card codes."; and that said determination can be used to control the result of an amusement game (i.e. a slot machine) ('440, col. 7, lines 43-53; and a lottery game (i.e. awarding of a |
|   | prize) ('440, col. 11, line 67 to col.12, line 2).  Clapper, Jr. teaches a gaming piece (specifically, a pull tab) where the win/loss indicator is unrecognizable to the player ('975, col. 3, lines 40-58)   |
|   | Raha-Au-Tomaattiyhdistys (PCT/F190/00254) (pg. 2, lines 15 - 20) discusses combining a lottery game and an amusement game ("card game").  |
| entering the code by the player into a processor prior to amusement game play;  | Cohen, et al. ('440, col. 3, lines 16-17) and Clapper, Jr. ('975, col. 7, lines 33-43) teach methods where the inserts the gaming piece with the code into the processor.   |
|   | Cohen, et al. discloses that keyboards can be used to enter data ('440, col. 14, lines 9-12); and that a keyboard can be used to enter ticket codes ('440, col. 7, lines 4-7).  |
| the processor generating the amusement  | Cohen, et al. teaches generating and displaying   |

| U.S. Patent No. 5,569,082   | Prior Art References  |
|---|---|
| game on a display for play by the   | a game ('440, col. 9, line 43 - col. 10, line 17;   |
| player, the player controlling game play<br>by inputting game parameters to the<br>processor;                                   | claim 1, elements a, b and c; and col. 3. line 3 to col. 4, line 9), Cohen, et al, also describes that the player initiates the game. (col. 3, lines 16-17)   |
|   | Raha-Au-Tomaattiyhdistys (PCT/F190/00254 page 1, line 32 to page 2, line 34) teaches a method where a lottery game machine presents the player with the illusion of playing a game of skill or chance (for amusement purposes) even though the outcome is predetermined.  |
|   | Troy, et al. ('197 – claim 32) contains the following element: "a game selection means capable of allowing a player to choose between a first type game and a second type game; a means of allowing a player to select a particular combination of elements to be used in the first type game;"   |
|   | All video games do this, making it obvious.   |
| the processor controlling whether the player will win or lose the amusement game based upon the code entered by the player; and | Cohen, et al. teaches a method whereby the outcome of the game can be predetermined ('440, col. 3, lines 39-49) See also col. 7, lines 43-47 and col, 5, line 18 (discussing that it is a computer).  |
|   | Raha-Au-Tomaattiyhdistys (PCT/F190/00254 page 1, line 11 to page 2, line 34) teaches a method where a lottery game machine presents the player with the illusion of playing a game of skill or chance even though the outcome is predetermined. It also teaches why it is sometimes important for the processor, not the player, to control whether the player will win or lose the amusement game. |
|   | Troy, et al. teaches "said central processor having a preprogrammed means capable of preselecting what particular play will be a winning play based upon pre-established standard for winning plays." (197 – claim 32)  |
| providing on a display an indication to   | Cohen, et al. (col. 9, line 42 - col. 10, line 17)  |
| the player of the amusement game win  | discloses a display and how a player knows  |
| or loss based upon the code.  | whether he won or lost the amusement game.  |

| U.S. Patent No. 5,569,082 | Prior Art References  |
|---------------------------|---|
|                           | Raha-Au-Tomaattiyhdistys (PCT/F190/00254 page 1, line 32 to page 2, line 34) teaches a method where a lottery game machine presents the player with the illusion of playing a game of skill or chance even though the outcome is predetermined; see also claim 1, p.7 lines 11-16 ("the display device is arranged to visually display the outcome of the lot drawing in terms of the rules of a card game or other similar game known per se."). |
|                           | Troy, et al. ('197 – claim 32) contains the following element: "said central processor having a preprogrammed means capable of preselecting what particular play will be a winning play based upon pre-established standard for winning plays."   |

| U.S. Patent No. 5,569,082  | Prior Art References  |
|--|---|
| 4. The method of claim 1 wherein the gaming piece includes paper media for storing the code. | Paper gaming pieces containing codes have been around for at least as long as scratch games, pull tabs, racing stubs, etc. – this is obvious.  Cohen, et al. (col. 3, lines 5-15) discloses a |
|  | game card which clearly covers paper game cards.  Clapper, Jr. teaches a paper gaming piece   |
|  | where the win/loss indicator is stored (*975, col. 3, lines 40-47).   |

| U.S. Patent No. 5,569,082            | Prior Art References  |
|--------------------------------------|---|
| 6. The method of claim 1 wherein the | Clapper, Jr. ('975, page 1, lines 40-46)  |
| amusement game includes a card game. | discloses a card came.  |
|                                      | Raha-Au-Tomaattiyhdistys (WO 91/06931, page 2, lines 4-14); see also p. 5, lines 19-22 ("In place of the card combinations of the poker game the outcome of the game can be shown in terms of any other well-known card game or other similar game.") |

| U.S. Patent No. 5,569,082 | Prior Art References   |
|---------------------------|--|
|                           | Troy, et al. ('742, col. 6, lines 50-53; '197, col. 4, lines 49-52) Describes that the player will have a "choice between, for example, bowling, darts, dice or cards etc."  Obvious — card games have been around for thousands of years. |

| U.S. Patent No. 5,569,082   | Prior Art References  |
|---|---|
| 8. The method of claim 1 wherein the step of entering the code into a processor includes a processor within a computing device. | Cohen, et al. ('440, col. 3, lines 16-17) and Clapper Jr. ('975, col. 7, lines 33-43) teach methods where the game machine that has a processor reads the gaming piece. |
|   | Obvious – stating that the gaming device is a computer. See also Cohen, et al. ('440, col. 5, lines 16-20).   |

| U.S. Patent No. 5,569,082  | Prior Art References  |
|--|---|
| 9. The method of claim 1 wherein the                                   | Obvious – the computer can be connected to  |
| step of entering the code into a processor includes a processor within | the Internet through an ISP, AOL for example.   |
| an on-line subscription service.                                       | Troy, et al. ('197, col. 20, lines 8-9; '742, col. 8, lines 12-31) describes a plurality of playing |
|  | means remote from the central processor.  |
|  | Scanlon ('522, col. 3, line 65 to col. 4, line 8),  |
|  | also discusses playing the game from remote   |
|  | locations.  |

| U.S. Patent No. 5,569,082   | Prior Art References   |
|---|--|
| 10. A lottery type game comprising:   |  |
| a gaming piece, said gaming piece   | Cohen, et al. teaches a method whereby ('440,  |
| including a code which includes data  | col. 3, lines 6-9) "each patron who wishes to  |
| indicating whether a player wins or   | play the promotional game in an effort to win  |
| loses the lottery game and an amusement game, said data being unrecognizable to the player, such that the player does not know whether the player will win or lose the games prior to play of the amusement game; | prizes obtains a game card by registering at a suitable service desk"; and that ('440, col. 3, lines 39-49) "certain selection criteria can be established so that the formation of a winning combination will be less than entirely random although it will still appear to be random to the playing patron. For example, winners could be established based on preselected game card codes."; ; and that said determination can be |

| U.S. Patent No. 5,569,082              | Prior Art References   |
|--|--|
| 0.3. Fatcht 140. 5,503,002             | used to control the result of an amusement   |
|  | game (i.e. a slot machine) ('440, col. 7, lines  |
|  | 43-53; and a lottery game (i.e. awarding of a  |
|  |  |
|  | prize) ('440, col. 11, line 67 to col.12, line 2).   |
|  | Clapper, Jr. teaches a gaming piece (specifically, a pull tab) where the win/loss indicator is unrecognizable to the player ('975,       |
|  | col. 3, lines 40-58)   |
|  | Raha-Au-Tomaattiyhdistys (PCT/F190/00254) (pg. 2, lines 15 - 20) discusses combining a lottery game and an amusement game ("card game"). |
| a processor for receiving said code    | Cohen, et al. ('440, col. 3, lines 16-17) and  |
| input by the player prior to amusement | Clapper Jr. ('975, col. 7, lines 33-43) teach  |
| game play;                             | methods where the processor reads the gaming   |
|  | piece prior to game play.  |
|  |  |
|  |  |
| said processor generating the          | Cohen, et al. teaches generating a game ('440,   |
| amusement game on a display for play   | claim 1, elements a, b and c; and col. 3. line 3   |
| by the player,                         | to col. 4, line 9  |
| No.                                    | Raha-Au-Tomaattiyhdistys (PCT/F190/00254   |
|  | page 1, line 32 to page 2, line 34) teaches a  |
|  | method where a lottery game machine presents   |
|  | the player with the illusion of playing a game   |
|  | of skill or chance (for amusement purposes)  |
|  | even though the outcome is predetermined.  |
|  | All video games do this, making it obvious.  |
| said processor determining whether the | Cohen, et al. teaches a method whereby the   |
| player will win or lose the amusement  | outcome of the game can be predetermined   |
| game based upon said code;             | ('440, col. 3, lines 39-49) See also col. 7, lines   |
| and                                    | 43-47 and col, 5, line 18 (discussing that it is a computer).  |
|  |  |
|  | Raha-Au-Tomaattiyhdistys (PCT/F190/00254   |
|  | page 1, line 11 to page 2, line 34) teaches a  |
|  | method where a lottery game machine presents   |
|  | the player with the illusion of playing a game   |
|  | of skill or chance even though the outcome is  |
|  | predetermined. It also teaches why it is   |
|  | sometimes important for the processor, not the   |
|  | player, to control whether the player will win or lose the amusement game.   |
|  | or lose the anticement game.   |
|  |  |

| U.S. Patent No. 5,569,082   | Prior Art References  |
|---|---|
|   | Troy, et al. ('197 - claim 32) contains the   |
|   | following element: "said central processor  |
|   | having a preprogrammed means capable of   |
|   | preselecting what particular play will be a   |
|   | winning play based upon pre-established   |
|   | standard for winning plays."  |
| a display for providing an indication to<br>the player of the amusement game win<br>or loss based upon said code. | Cohen, et al. teaches a method whereby indication of a win or a loss is displayed based on the code ('440, col. 3, lines 39-49; and col. 3, line 63 to col. 4, line 11).                        |
|   | Raha-Au-Tomaattiyhdistys (WO 91/06931, claim 1) specifies that "the display device is arranged to display the outcome of the lot drawing in terms of a card game or other similar game per se." |

| U.S. Patent No. 5,569,082   | Prior Art References  |
|---|---|
| 13. The lottery type game of claim 10                                   | Paper gaming pieces containing codes have   |
| wherein said gaming piece includes a paper media for storing said code. | been around for at least as long as scratch games, pull tabs, racing stubs, etc. — this is obvious.           |
|   | Cohen, et al. (col. 3, lines 5-15) discloses a game card which clearly covers paper game cards.               |
|   | Clapper, Jr. teaches a paper gaming piece where the win/loss indicator is stored ('975, col. 3, lines 40-47). |

| U.S. Patent No. 5,569,082   | Prior Art References  |
|---|---|
| 15. The lottery type game of claim 10 wherein said amusement game includes a card game. | Clapper, Jr. ('975, page 1, lines 40-46) discloses a card came.   |
|   | Raha-Au-Tomaattiyhdistys (WO 91/06931, page 2, lines 4-14); see also p. 5, lines 19-22 ("In place of the card combinations of the poker game the outcome of the game can be shown in terms of any other well-known card game or other similar game.") |

| U.S. Patent No. 5,569,082 | Prior Art References  |
|---------------------------|---|
|                           | Troy, et al. ('742, col. 6, lines 50-53; '197, col. 4, lines 49-52) Describes that the player will have a "choice between, for example, bowling, darts, dice or cards etc." |
|                           | Obvious – card games have been around for thousands of years.   |

| U.S. Patent No. 5,569,082   | Prior Art References  |
|---|---|
| 16. The lottery type game of claim 10 wherein said processor includes a computing device. | Obvious – stating that the gaming device is a computer.   |
|   | Cohen, et al. ('440, col. 3, lines 16-17) and Clapper Jr. ('975, col. 7, lines 33-43) teach methods where the game machine that has a processor reads the gaming piece. |
|   | Obvious – stating that the gaming device is a computer. See also Cohen, et al. ('440, col. 5, lines 16-20).   |

| U.S. Patent No. 5,569,082   | Prior Art References   |
|---|--|
| 17. The lottery type game of claim 10 wherein said processor includes a processor within an on-line | Obvious – the computer can be connected to the Internet through an ISP, AOL for example.   |
| subscription service.   | Troy, et al. ('197, col. 20, lines 8-9; '742, col. 8, lines 12-31) describes a plurality of playing means remote from the central processor. |
|   | Scanlon ('522, col. 3, line 65 to col. 4, line 8), also discusses playing the game from remote locations.                                    |

The following chart further demonstrates how the prior art invalidates the '082 patent if we assume Ingenio's definitions and claim interpretations are applicable,2 though I find Ingenio's claim construction incorrect. From Ingenio's response to interrogatories, I infer that

<sup>&</sup>lt;sup>2</sup> It should be noted that it is my opinion that the analysis of Cohen and the other prior art listed above would also invalidate the asserted claims of the '082 patent under Ingenio's broader claim construction.

the following definitions apply to the claim language in the '082 and '603 patents according to Ingenio's interpretations:

Code: ""a system of symbols (as letters or numbers) used to represent assigned and often secret meanings" Merriam Webster Online Dictionary"

Data: "In this context, "data" is commonly defined as "information in numerical form that can be digitally transmitted or processed.""

This is somewhat inconsistent in that gaming pieces commonly contain letters and symbols as well. Consequently, I have assumed this to include any kind of data, whether it is in numerical form when on the gaming piece or not, if it can be converted to numerical form whereby it can be digitally transmitted or processed.

Indicate:

"To indicate means "to show the way to of the direction of; point out" (Cambridge Advanced Learner Dictionary). Thus, the information in numerical form shows the way to, points to, or makes clear in another way to the win/loss result."

Thus, pointing to the location of data that is indicative of the win/loss is the same as containing it; i.e., indirection is immaterial.

Read: ""to input data from a storage device, a data medium, or any other source." Computer User's High-tech Dictionary ... Thus, "reading of the code by a processor" means to input the code (a system of symbols that represent an assigned and secret meaning from some source). That source may thus include a computer program/software source"

Thus whether the player manually enters a code is immaterial - the computer can "read" from the keyboard input memory, for example. Also, because the definition includes a "program/software source," the gaming piece can be virtual - i.e., it does not have to be something physical, like a paper ticket or a token, for instance, when it is in the possession of the player.

By inference, the term "unrecognizable" has to be defined to allow indication to be unrecognizable if it is not embedded in the code (i.e., not directly there), invisible, or inaccessible.

Using Ingenio's aforementioned definitions and broadened claim interpretations, the

following claim charts demonstrate how the '082 patent is anticipated by the Morris patent. Note that the prior art listed in the previous claim charts have not been relisted in the following claim charts to avoid unnecessary redundancy, though they are all equally applicable. Thus, if the trier of fact were to determine that the Morris patent does not disclose any limitation(s) of the asserted claims of the '082 patent, then those claims would still be rendered obvious by combining Morris with the prior art cited in the previous claim charts.

| U.S. Patent No. 5,569,082   | Prior Art References   |
|---|--|
| 1. A method for playing a player lottery  |  |
| game comprising the step of:  |  |
| acquiring by a player a game piece, the gaming piece including a code which includes data indicating whether the player wins or loses the lottery game and an amusement game, the data being unrecognizable to the player, such that the player does not know whether the player will win or lose the game prior to play of the amusement game; | Morris, et al. teaches a video game where tickets can be selected and purchased ('035, col. 5, lines 52-55; col. 7, lines 29-31); containing a code indicating win/loss ('035, col. 7, lines 29-50) of a lottery game ('035, col. 5, line 67 to col. 6, line 2) and an amusement game ('035, col. 5, lines 38-40) where the player never sees the code.  |
| entering the code by the player into a processor prior to amusement game play;  | Morris, et al. teaches a method where ticket codes are not transferred to the game machine until the player presses "play" thus causing the code to be entered into the game processor ('035, col. 13 20-24; and fig. 9H). Note that in the disclosure the "select" button does not actually select a ticket, it rejects the current ticket and causes the system to show the next available ticket. |
|   | Morris, et al. teaches that data is keyed in "from preexisting paper pull-tab lottery tickets into the central computer." (col. 7, lines 29-31).   |
| the processor generating the amusement<br>game on a display for play by the<br>player, the player controlling game play<br>by inputting game parameters to the<br>processor;  | Morris, et al. teaches that an amusement game is generated and the game play can be interactive '035, (col. 15, 24-29 and fig. 9G). See also, col. 5, 36-40.   |
| the processor controlling whether the<br>player will win or lose the amusement<br>game based upon the code entered by   | Morris teaches that the processor controls win/loss by referencing a code ('035, col. 15, lines 32-41). See also, col 7, 29-40.  |

| U.S. Patent No. 5,569,082   | Prior Art References  |
|---|---|
| the player; and   |   |
| providing on a display an indication to<br>the player of the amusement game win<br>or loss based upon the code. | Morris teaches displaying win/loss based on a code ('035, col. 15, lines 31-51) |

| U.S. Patent No. 5,569,082 | Prior Art References   |
|---------------------------|--|
|                           | Morris teaches a method whereby paper pull-<br>tab tickets are entered into the system ('035,<br>col. 7, lines 29-31). |

| U.S. Patent No. 5,569,082            | Prior Art References                        |
|--------------------------------------|---|
| 6. The method of claim 1 wherein the | Morris teaches the use of card games ('035, |
| amusement game includes a card game. | col. 5, lines 36-40.                        |

| U.S. Patent No. 5,569,082   | Prior Art References                                    |
|---|---|
| 8. The method of claim 1 wherein the step of entering the code into a processor includes a processor within a computing device. | Morris teaches using a computing device ('035, fig. 5). |
|   |   |

| U.S. Patent No. 5,569,082  | Prior Art References   |
|--|--|
| 9. The method of claim 1 wherein the step of entering the code into a processor includes a processor within an on-line subscription service. | Morris teaches using a LAN, or a telephone line connected to a public network ('035, col. 31, lines 9-11). |

| U.S. Patent No. 5,569,082  | Prior Art References  |
|--|---|
| 10. A lottery type game comprising:  |   |
| a gaming piece, said gaming piece including a code which includes data indicating whether a player wins or loses the lottery game and an amusement game, said data being unrecognizable to the player, such that the player does not know whether the player will win or lose the games prior to play of the amusement game; | Morris, et al. teaches a video game where tickets can be selected and purchased ('035, col. 5, lines 52-55; col. 7, lines 29-31); containing a code indicating win/loss ('035, col. 7, lines 29-50) of a lottery game ('035, col. 5, line 67 to col. 6, line 2) and an amusement game ('035, col. 5, lines 38-40) where the player never sees the code. |
| a processor for receiving said code input by the player prior to amusement game play;  | Morris, et al. teaches a method where ticket codes are not transferred to the game machine until the player presses "play" thus causing the   |

| U.S. Patent No. 5,569,082  | Prior Art References   |
|--|--|
|  | code to be entered into the game processor ('035, col. 13 20-24; and fig. 9H). Note that in the disclosure the "select" button does not actually select a ticket, it rejects the current ticket and causes the system to show the next available ticket. |
|  | Morris et al. teaches that operators "key in data from preexisting paper pull-tab lottery tickets into the central computer." (col. 7, 29-31)  |
| said processor generating the amusement game on a display for play by the player,                                    | Morris, et al. teaches that an amusement game is generated and the game play can be interactive '035, (col. 15, 24-29 and fig. 9G). See also Col. 5, 36-40.  |
| said processor determining whether the<br>player will win or lose the amusement<br>game based upon said code;<br>and | Morris teaches that the processor controls win/loss by referencing a code ('035, col. 15, lines 32-41)   |
| a display for providing an indication to<br>the player of the amusement game win<br>or loss based upon said code.    | Morris teaches displaying win/loss based on a code ('035, col. 15, lines 31-51)  |

| U.S. Patent No. 5,569,082             | Prior Art References                           |
|---------------------------------------|--|
| 13. The lottery type game of claim 10 | Morris teaches a method whereby paper pull-    |
| wherein said gaming piece includes a  | tab tickets are entered into the system ('035, |
| paper media for storing said code.    | col. 7, lines 29-31).                          |

| U.S. Patent No. 5,569,082   | Prior Art References   |
|---|--|
| 15. The lottery type game of claim 10 wherein said amusement game includes a card game.   | Morris teaches the use of card games ('035, col. 5, lines 36-40. |
| U.S. Patent No. 5,569,082   | Prior Art References   |
| 16. The lottery type game of claim 10 wherein said processor includes a computing device. | Morris teaches using a computing device ('035, fig. 5).          |

| U.S. Patent No. 5,569,082             | Prior Art References                           |
|---------------------------------------|--|
| 17. The lottery type game of claim 10 | Morris teaches using a LAN, or a telephone     |
| wherein said processor includes a     | line connected to a public network ('035, col. |
| processor within an on-line           | 31, lines 9-11).                               |
| subscription service.                 |  |

I am not aware of any evidence of secondary considerations that would support non-obviousness of either the '082 or '603 patents. Ingenio's conclusory statements set forth in its Response to Interrogatory No. 10 regarding commercial success requires more evidence for proper evaluation and Ingenio's contentions regarding the failures of others to solve problems allegedly solved by the patents-in-suit are contrary to the prior art and the disclosures do note necessarily solve what they claim they do. See Enablement discussion below. I reserve the right to consider and evaluate any evidence regarding secondary considerations if and when it is provided, and update this report accordingly.

## 2. Enablement

In the section entitled "Background of the Invention" in both asserted patents, the inventor cites "fraud caused by game card theft and/or tampering" as one of the problems inherent in current gaming schemes. ('082 col. 1, lines 36-52; '603 col. 1, lines 39-56). In the following paragraph he states: "There are many ways in which these problems are overcome by the present invention." ('082 col. 1, lines 52-54; 603 col. 1, lines 56-58). When describing the so called destiny code, the inventor states: "Block 10 shows that the start of the system requires a secure system for generating and controlling and tracking encrypted symbolic codes that signify the outcome of the particular game of chance to be played by the player. These codes are called "Destiny Codes" because their primary function is to store the outcome of the game of chance." ('082, col. 2, line 54 to col. 3, line 3; '603, col. 3, lines 3-19). Clearly, encryption and decryption play an important role in this invention. In his disclosure the inventor states nothing about how the requisite level of security is to be achieved, how encryption is done, or how decryption is done.

There are many encryption schemes that are well known. However, encryption schemes suitable for the type of application disclosed in the '082 and '603 patents are not well known and clearly not within the capabilities of one possessing ordinary skill in the art.

Assumptions one can make about the requirements of an encryption scheme suitable for the

- The gaming pieces are in play for a long time (i.e. longer than the time it takes to send an encrypted packet over the Internet, for example). In fact, codes need to be valid for weeks, or more.
- Gaming pieces have an obvious value (i.e., they may be worth money).
- Gaming pieces are portable and contain a code indicative of win/loss. Therefore a person can possess and analyze a gaming piece, and build fakes.
- All gaming machines, or computers, interpreting the gaming piece have to know how to decrypt the code - therefore they have to all know the decryption code.

Therefore an encryption/decryption scheme is necessary that:

- Takes more time to "crack" than the lifespan of the tickets and the game.
- Can withstand being analyzed based on a sample set which is known to contain only information of interest.
- Can withstand analysis of a large sample set in the possession of the analyst.
- Can withstand the reverse engineering of the device (such as a gambling machine) or software that runs on standard computers (which is an even easier reverse engineering task).

Typically encryption schemes are evaluated in economic terms: "Is the cost of breaking the code higher than the value of the information it protects?" Common Internet encryption methods, for example, assume that a key is short lived (so the total amount of information protected is small and therefore not very valuable) and that there is no way to know, by looking at the encrypted data, whether it has any potential value or not. Thus, one cannot assume that just any encryption scheme, no matter how secure it is in some environments, will work in this one.

One of the basic factors to consider when evaluating encryption schemes is to determine whether there is reliance on a global secret. For example, having all instances of a type of machine know a common decryption key (or key whereby a decryption key can be easily determined), or having too many information items using the same key generally fails this

standard. If someone procures the machine or software, reverse engineers it, and discovers a high value key or process, there is a correspondingly high amount of damage that he can do. These are very difficult problems to solve and certainly not within the capabilities of one possessing ordinary skill in the art, given the disclosures of the '082 and '603 patents.

It is therefore my opinion that the inventor has not sufficiently disclosed the invention(s) protected by '082 and '603 patents so that a person possessing ordinary skill in the art could build the disclosed system in such a way that the requisite level of security is achieved.

#### 3. Indefiniteness

Dependent claim 16 of the '082 patent recites: "The lottery type game of claim 10 wherein said processor includes a computing device." '082 patent, Col. 12, lines 33-34. It is my understanding that added elements in dependent claims are not present in the claims from which they depend. I therefore understand that this limitation does not simply mean that the "processor" is a "computing device" as that is necessarily true of the processor of claim 10. If read literally, then, this limitation would require that the processor in independent claim 10 contains a computer within it. That, of course, is impossible. Computers contain processors, not the other way around.

Although Ingenio has not offered a construction of this claim term, I understand that Ingenio accuses GameLogic of infringing claim 16. See Ingenio's response to Interrogatory No. 3 at "5,569,082 Infringement Chart" p. 4 (asserting that GameLogic infringes because the user's computer contains a processor, but not asserting that the processor contains a computer). If claim 16 is not to be understood as requiring the processor to contain a computer within it, then it is my opinion that its meaning is unclear. In that case, the claim is invalid as indefinite.

#### C. Validity Analysis of the '603 Patent

#### Anticipation and Obviousness. 1.

Each and every element of asserted claim 1 was well-known prior to '603 patent. Although it is my understanding that a patent may properly claim a novel combination of previously-known elements, the combination claimed by the '603 patent is not novel. Rather,

the claimed invention of the '603 patent would have been obvious to a person having ordinary skill in the pertinent art at the time of the purported invention.

As demonstrated in the claim charts below, the Cohen and Morris references anticipate claim 1 of the '603 patent. The Cohen and Morris patents contain disclosures sufficient to enable one of ordinary skill in the art to practice the claims of the '603 patent.

In addition, if the trier of fact were to find that the Cohen or Morris patents are missing any limitation(s) of the asserted claim of the '603 patent, then the combined teachings of, at least, Morris or Cohen with the following prior art references renders the '603 patent obvious:

- U.S. Patent No. 5,377,975, R. Clapper Jr., "Electronic Gaming Apparatus and Method":
- U.S. Patent No. 5,373,440, L. Cohen, et al., "Promotional Game Method and Apparatus Therefor";
- International App. No. PCT/F190/00254, Raha-Au-Tomaattiyhdistys, "A Game for Playing Apparatus";
- U.S. Patent No. 5,324,035, Morris, et al., "Video Gaming System with Fixed Pool of Winning Plays and Global Pool Access;"
- U.S. Patent No. 4,922,522, J. Scanlon, "Telecommunications Access to Lottery Systems";
- U.S. Patent No. 4,494,197, S. Troy, et al., "Automatic Lottery System"; and
- U.S. Patent No. 4,689,742, S. Troy, et al., "Automatic Lottery System."

All of these prior art references relate to amusement and/or lottery games and data exchange for those games that yields a more enjoyable and interactive experience for the player, while maintaining the integrity of the game. Therefore, one of ordinary skill would be motivated to combine features of any two of the prior art documents to obtain a desired level for these features. The reason, suggestion, and motivation to combine are found explicitly or implicitly:

- in the prior art references themselves;
- in the knowledge of those of ordinary skill in the art that certain references, or disclosures in those references, are of special interest or importance in the field; or
- from the nature of the problem to be solved leading those of skill in the art to look to references relating to possible solutions to that problem.

The first chart analyzes the prior art applying my claim construction of the relevant terms, as set forth in Section VI. of this report:

| U.S. Patent No. 5,709,603   | Prior Art References   |
|---|--|
| 1. A method for playing a lottery type  |  |
| game comprising the steps of:   |  |
| acquiring by a player a gaming piece, the gaming piece including a code which includes data indicating whether the player wins or loses the lottery type game and an amusement game, the data being unrecognizable to the player, such that the player does not know whether the player will win or lose the games prior to play of the amusement game; | Cohen, et al. teaches a method whereby ('440, col. 3, lines 6-9) "each patron who wishes to play the promotional game in an effort to win prizes obtains a game card by registering at a suitable service desk" and that ('440, col. 3, lines 39-49) "certain selection criteria can be established so that the formation of a winning combination will be less than entirely random although it will still appear to be random to the playing patron. For example, winners could be established based on preselected game card codes." and that said determination can be used to control the results of an amusement game (i.e. a slot machine) ('440, col. 7, lines 43-53; and a lottery game (i.e. awarding of a prize) ('440, col. 11, line 67 to col. 12, line 2). |
|   | Clapper, Jr. teaches a gaming piece (specifically, a pull tab) where the win/loss indicator is unrecognizable to the player ('975, col. 3, lines 40-58).  Raha-Au-Tomaattiyhdistys (PCT/F190/00254)  |
|   | (pg. 2, lines 15 - 20) discusses combining a lottery game and an amusement game ("card game").   |
| reading the code by a processor;  | Cohen, et al. ('440, col. 3, lines 16-17) and  |

| U.S. Patent No. 5,709,603   | Prior Art References  |
|---|---|
|   | Clapper Jr. ('975, col. 7, lines 33-43) teach   |
|   | methods where the game machine reads the  |
|   | gaming piece.   |
| the processor generating the amusement<br>game on a display for play by the                                     | All video games do this, making it obvious.   |
| player;   | Cohen, et al. teaches generating a game ('440, claim 1, elements a, b and c; and col. 3. line 3 to col. 4, line 9).   |
|   | Raha-Au-Tomaattiyhdistys (PCT/F190/00254 page 1, line 32 to page 2, line 34) teaches a method where a lottery game machine presents the player with the illusion of playing a game of skill or chance (for amusement purposes) even though the outcome is predetermined.  |
|   | Troy, et al. ('197 – claim 32) contains the following element: "a game selection means capable of allowing a player to choose between a first type game and a second type game; a means of allowing a player to select a particular combination of elements to be used in the first type game;"   |
|   | All video games do this, making it obvious.   |
| the processor controlling whether the<br>player will win or lose the amusement<br>game based upon the code; and | Cohen, et al. teaches a method whereby the outcome of the game can be predetermined ('440, col. 3, lines 39-49) See also col. 7, lines 43-47 and col. 5, line 18 (discussing that it is a computer).  |
|   | Raha-Au-Tomaattiyhdistys (PCT/F190/00254 page 1, line 32 to page 2, line 34) teaches a method where a lottery game machine presents the player with the illusion of playing a game of skill or chance even though the outcome is predetermined. It also teaches why it is sometimes important for the processor, not the player, to control whether the player will win or lose the amusement game. |
|   | Troy, et al. ('197 – claim 32) "said central processor having a preprogrammed means capable of preselecting what particular play will be a winning play based upon preestablished standard for winning plays."  |

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|--|---|
| U.S. Patent No. 5,709,603  | Prior Art References  |
| providing on the display an indication<br>to the player of the amusement game<br>win or game loss based upon the code. | Cohen, et al. (col. 9, line 42 - col. 10, line 17) discloses a display and how a player knows whether he won or lost the amusement game, based upon the code.   |
|  | Raha-Au-Tomaattiyhdistys (PCT/F190/00254 page 1, line 32 to page 2, line 34) teaches a method where a lottery game machine presents the player with the illusion of playing a game of skill or chance even though the outcome is predetermined; see also claim 1, p.7 lines 11-16 ("the display device is arranged to visually display the outcome of the lot drawing in terms of the rules of a card game or other similar game known per se."). |
|  | Troy, et al. ('197 – claim 32) contains the following element: "said central processor having a preprogrammed means capable of preselecting what particular play will be a winning play based upon pre-established standard for winning plays."   |

The following chart further shows how the prior art invalidates the asserted claim of the '603 patent if we assume Ingenio's definitions and claim interpretations are applicable, though I believe them to be incorrect:

| U.S. Patent No. 5,709,603   | Prior Art References  |
|---|---|
| 1. A method for playing a lottery type game comprising the steps of:  |   |
| acquiring by a player a gaming piece, the gaming piece including a code which includes data indicating whether the player wins or loses the lottery type game and an amusement game, the data being unrecognizable to the player, such that the player does not know whether the player will win or lose the games prior to play of the amusement game; | Morris, et al. teaches a video game where tickets can be selected and purchased ('035, col. 5, lines 52-55; col. 7, lines 29-31); containing a code indicating win/loss ('035, col. 7, lines 29-50) of a lottery game ('035, col. 5, line 67 to col. 6, line 2) and an amusement game ('035, col. 5, lines 38-40) where the player never sees the code. |
| reading the code by a processor;  | Morris, et al., teaches a method where ticket   |

<sup>&</sup>lt;sup>3</sup> It should be noted that my analysis set forth in the previous chart would also invalidate the '603 patent under Ingenio's broader claim construction.

| U.S. Patent No. 5,709,603  | Prior Art References   |
|--|--|
|  | codes are read by the processor. '035, col. 7, lines 29-37). See also col.14, line 64 to col. 15, line 7.  |
| the processor generating the amusement game on a display for play by the player;                                       | Morris, et al. teaches that an amusement game is generated and the game play can be interactive '035, (col. 15, 24-29 and fig. 9G). See also, col. 5, 36-40. |
| the processor controlling whether the player will win or lose the amusement game based upon the code; and              | Morris teaches that the processor controls win/loss by referencing a code ('035, col. 15, lines 32-41). See also, col 7, 29-40.                              |
| providing on the display an indication<br>to the player of the amusement game<br>win or game loss based upon the code. | Morris teaches displaying win/loss based on a code ('035, col. 15, lines 31-51)  |

#### 2. Enablement

See Enablement discussion set forth above at Section VII. (B)(2), which addresses both the '082 and '603 patents.

## VIII. MATERIALITY OF THE RAHA AND COHEN REFERENCES TO THE PATENTABILITY OF THE '082 PATENT.

I was asked to assume the following relating to the standard of materiality. Information is material to patentability if it is not cumulative to information already of record or being made of record in the application, and it either: (1) establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) refutes, or is inconsistent with, a position the applicant takes in opposing an argument of unpatentability relied on by the Patent Office, or asserting an argument of patentability. 37 C.F.R. § 1.56. Therefore, information is not material if it is not as pertinent as or is merely cumulative to that considered by the examiner. In addition, information about the inventor's knowledge of a reference and the motivations that he or she derived from it are not relevant to the objective determination of materiality.

Further, it is my understanding that an inventor, his agents (i.e. patent attorneys), and anybody else who is materially involved in the prosecution of a patent has a duty of candor to the United States Patent and Trademark Office (the "USPTO"). Inequitable conduct is a violation of that duty. It is my understanding that in order to substantiate an allegation of

inequitable conduct, two things have to be proven: intent to deceive or withhold, and that the item or information in question is material.

The patent application which eventually issued as the '082 patent was also filed with the European Patent Office (PCT/US96103320). On September 5, 1996, the European Patent Office ("EPO") issued an international search report rejecting the application based on two prior art references "of particular relevance," namely:

International Application Number: PCT/F190/00254

Title: A Game Playing Apparatus Inventor: Raha-Au-Tomaattiyhdistys

International Publication Number: WO 91/06931 International Publication Date: 16 May 1991

U.S. Patent No. 5,373,440

Title: Promotional Game Method and Apparatus Therefore

Inventor(s): Cohen, et al. Date of Patent: Dec. 13, 1994

On October 29, 1996 (54 days later), the '082 patent issued. It is my understanding that the applicant never brought either of these references to the attention of the examiner, nor did the examiner consider them.

In my opinion, the prior art used by the EPO to reject the Kaye application is highly material to the '082 patent application under 37 C.F.R. 1.56. The Cohen patent (5,373,440) is an anticipatory reference to the '082 patent and the Raha patent is also highly material prior art. See Claim Charts above. Furthermore, the European Patent Office also thought that Cohen and Raha anticipated the claims in the European counterpart of the '082 patent, as shown in the European Search Report. See PK00043. The European Patent Office rejected the Kaye application based on each of the Cohen and Raha references, stating that each reference is "of particular relevance" and that "the claimed invention cannot be considered novel or cannot be considered to involve an inventive step" over each of Cohen and Raha. See id.

Further, during the prosecution of the '082 patent, the US examiner rejected claims 1-21 on the grounds of indefiniteness and, among other things, suggested that the claim language be amended to change instances of "game" and "game of chance" to either "amusement game" or "lottery game." (GL00177, section 1). The Raha patent application ('254) thoroughly teaches combining a predetermined lottery type game with what appears to be -but really is not—a game of chance or skill (PCT/F190/00254 page 1, line 32 to page 2, line 34). Thus, Raha was directly pertinent to an explicit concern of the examiner, and as discussed above, Raha, in combination with other prior art, would have rendered the claims of the '082 patent obvious.

The Cohen and Raha references are not cumulative to information already of record in the prosecution of the '082 patent, and they establish, by themselves and/or in combination with other prior art, a prima facie case of unpatentability. Indeed, both the EPO and I believe that these two references establish that the claims are invalid. (See Prior Art Charts provided above). Therefore, it is my opinion that the omitted prior art was material to the patentability of the claims of the '082 patent.

#### **EXHIBITS AND SUPPLEMENTATION** IX.

The exhibits that I intend to rely upon as support for my opinions may include copies / enlargements of both patents and the contents of their file histories, charts comparing claims of both patents with literature, copies or enlargements of any other documents or sections thereof referred to in this report, any exhibits prepared by or on behalf of experts for either party, and any other exhibit admitted into evidence at trial. In addition, I may create or participate in the creation of certain demonstrative exhibits to assist me in providing potential trial testimony. I have not yet selected or created such exhibits.

This report summarizes my current opinion given the information available and analyzed to date. I plan to continue my investigation and study, including a review of documents that may yet be produced, and testimony from depositions that may yet be taken in this investigation, such as depositions of the inventor of the '082 and '603 patents and any expert(s) retained by Ingenio. In addition, I understand that I may be asked to respond to matters raised by Ingenio or opinions offered by Ingenio's expert(s), including those regarding claim construction.

Accordingly, I reserve the right to expand upon or modify my opinions as my investigation and study continue, and to supplement my opinions in response to any additional information that becomes available to me, to any matters raised by Ingenio, or to opinions provided by Ingenio expert(s).

DATED: January 15, 2006

Christopher L. Brandin

# Exhibit A

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Curriculum Vitae Page 1

Summary

Mr. Chris Brandin has over 25 years experience in the computer industry as a hardware designer and systems software engineer. Mr. Brandin's expertise encompasses both conventional and unconventional methods of Cryptography, the design of Parallel Processors, Distributed Computers, and Synthesizers. Chris has designed and was the principal author of several products for major software companies in the U.S., including Symantec Corporation and Powercard, which have sold over 1,000,000 copies and have won Product of the Year awards.

Mr. Brandin is the inventor of Digital Pattern Processing, and has served as CTO and CEO in the computer field for over 25 years. Mr. Brandin's companies produced two separate million-plus selling products and provided large-scale computers to virtually every financial exchange in New York and Chicago as well as other locations. He has also served as an expert in numerous high-profile patent litigation cases in the computer industry over the last 12 years. Mr. Brandin is considered an authority in processor architecture, coding theory, content management, and XML, having authored numerous magazine articles and contributed to books on the subjects. Mr. Brandin holds eleven issued patents with eight more pending. Mr. Brandin was identified as one of twenty-four "Architects of the Internet" by EETimes in a special edition of the publication and is a recipient of Aviation Week & Space Technology magazine's laurel in electronics.

Mr. Brandin has received degrees from the University of Maryland, Lowell Technology Institute and the Rochester Institute of Technology in the areas of Math, Physics and Journalism. Mr. Brandin holds several patents in computer-related technology.

#### Specific Expertise includes:

#### Tools

- Assembly Language Z80, x86, 68K, MIPS, SPARC, PowerPC, Motorola microcontrollers, Intel microcontrollers.
- C, C++, C#
- BASIC (several variations)
- COBOL
- **FORTRAN**
- LISP

#### Chip Design

- Standard Cell ASIC AMI
- Chip Express
- Altera most part families
- XILINX most part families

Filed 09/08/2006

## CHRIS BRANDIN

## Curriculum Vitae Page 2

### Hardware Design

- Computer processing hardware
- Encryption and coding hardware
- Network hardware
- Electronic music hardware
- Power Supplies

#### Software Design

- System save/resume software and firmware
- XML databases
- Pattern recognition software
- Digital sound processing software and firmware
- Network security software
- Digital image processing and printing software
- Pharmaceutical clinical trials software
- Genomics research software
- Statistical analysis software
- Encryption and coding software

## Professional Experience

#### TAEUS, Colorado Springs, Colorado

#### Engineering Programs Manager, 2003 - Present

Provides consulting services to major U.S. and international corporations on intellectual property and strategic business management. Management and support of multiple programs in all technical and service areas of business offered by TAEUS. Technical programs include hardware and software projects such as reverse engineering, code extraction and integrated circuit process analysis. Included in the various service projects are patent portfolio reviews, prior art searches and patent analysis reports.

Responsibilities include customer interface, program cost analysis, program scheduling, providing technical program direction, management of outside consultants as well as internal resources.

### NEOCORE, Colorado Springs, Colorado CTO & Chief Scientist, 1995 - 2003

A venture funded company, NeoCore was founded to commercialize Digital Pattern Processing (a technology Mr. Brandin invented). NeoCore's primary product is an XML information management system called XMS. XMS is an entirely self-constructing database that can manage heterogeneous datasets, including unstructured and semi-structured information along with more traditional structured data types. In late 2001, Mr. Brandin led an initiative to develop XMS-based products for the pharmaceutical

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and bioresearch industries. Products were placed at Merck, Varro (a genomics research company), and the Colorado Center for Computational biology. NeoCore also developed hardware targeted to the network security and associative processing markets.

#### CONSULTANT, 1993 - 1995

Consultant for TAEUS in patent infringement and forensic engineering cases. Also designed components for Yamaha, Alesys, and Ensoniq products in the electronic music field as an independent consultant.

#### **POWERCARD**

Managing Director for Technology, 1988 - 1993

A privately funded company, PowerCard produced internal uninterruptible power supplies and software for system save and restore functions. Much of the "hibernation" technology in use today was developed at PowerCard. A software version of PowerCard technology was marketed by Symantec as the flagship component for PC Tools versions 9 and 10, selling millions of copies.

#### BOS

President & CEO, 1978 - 1987

A privately funded company, BOS designed and manufactured large-scale multi-processor computers.

Used extensively in the financial and manufacturing industries, more multi-processor computers were probably sold by BOS than every other company producing them combined at the time. In a venture with a company called Network Utilities, trading and ticker consolidation systems were marketed to stock exchanges throughout the world. Eventually, that venture was acquired by Reuters, becoming Reuters Data Systems. In the manufacturing arena, GE and Gates used BOS computers to integrate manufacturing plants. In the case of Gates, all forms of manufacturing hardware—robots, guided vehicles, programmable controls—were controlled by BOS computers in an integrated environment. GE used distributed BOS computers to integrate manufacturing facilities spread out across South America.

#### SANDERS CORPORATION

Engineer, 1976 - 1978

Mr. Brandin installed and maintained computer systems throughout Colorado, New Mexico, Wyoming, Utah, and Montana. Sanders build large-scale networked systems for Mountain Bell, state, and local governments. Sanders also built systems used in national defense and electronic warfare applications.

## Curriculum Vitae Page 4

**Awards** 

PC Magazine Top 100, for the PowerCard Internal UPS, 1990.

PC Magazine Top 100, for PCResume, 1991.

Aviation Week and Space Technology Laurel in Electronics, for inventing Digital Pattern Processing,

EE Times Architect of the Internet, September 2000. Special issue honoring twenty-four people who they felt were designing the Internet of the future.

Celebrate Technology "Best Technology Innovation," for inventing Digital Pattern Processing, 2000.

#### **Patents**

Mr. Brandin holds twenty patents in the fields of Associative processing, power supply design, Digital Pattern Processing, and XML information management.

## **Publications**

"Information Modeling with XML," Chapter 1, XML Data Management: Native XML and SML-Enables Database Systems, Addison-Wesley Publishers, 2003.

"Moving Toward a Unified Information Environment," EAI Journal, p. 8, February 2003.

"Maximizing the Usefulness of XML," XML Journal, p. 16, Volume 3, Issue 12, December, 2002.

Contributor, XML Handbook, 4th edition, Prentice Hall PTR, 2002.

"Targeting XML Processing for the Web," EE Times, p. 20, September 27, 2000.

#### Presentations

"Making the Best of our Technologists," Colorado University Business Graduate School, 2001.

"Pattern Centric Information Management for Bioinformatics," International Bioinformatics Council Summit, Palo Alto, California, 2002.

"Growing a Technology Company," Colorado University Business Graduate School, 2002.

Curriculum Vitae Page 5

\*The Future of Computing," Keynote for Celebrate Technology Conference, 2002.

"New Artificial Intelligence Trends," Keynote for IEEE Annual Dinner, 2002.

Associations

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International Bioinformatics Council

Sun Microsystems Life Sciences Advisory Council

Colorado Center for Computational Biology

OASIS (XML standards)

W3C (Internet standards)

#### **BACKGROUND**

I attended courses at the Lowell Technology Institute, University of Maryland, the Rochester Institute of Technology, and the University of Colorado (continuing education course in business law). From 1969 to 1970, I studied electrical engineering at Lowell Technological Institute. From 1970 to 1973, I studied engineering with an emphasis in mathematics and physics with a minor in Journalism at the University of Maryland. In 1973, I transferred to the Rochester Institute of Technology under an accelerated program to study photography and the materials and sciences pertaining thereto. While at the Rochester Institute of Technology, I had the opportunity to use computers to design camera lenses and consequently developed a series of theories pertaining to the design of lenses that largely ran contrary to the state of the art. Specifically, I reasoned that rather than using computers to simply execute the same sort of calculations that were used manually, computers would be better used to simulate the behavior of light through substances and were sufficiently robust to actually simulate ray tracing. Also, I developed a theory postulating that, through the use of processes that are partially governed by random numbers, a computer could produce results that go beyond logical extrapolation, and would not be necessarily a consequence of what is known - in other words, the computer could produce unexpected results that even I, as the programmer, couldn't explain. I had developed an intense interest in computer technology by this time and I left the Rochester Institute of Technology in order to embark on a career in computer science because no computer science curriculum was available to me at that time.

My first job in the field was with Sanders Associates, which was in the business of providing large scale networked computer systems for telephone companies, state governments, and the federal government. Sanders was also in the electronic warfare business and thus had a significant presence at NORAD and other government and military agencies. At this time I became exposed to encryption and computer security (Tempest) methods having had to install computers at secure government sites, discover why they were not working, and make them operational. After leaving Sanders I consulted with NORAD and the Pentagon on several occasions pertaining to systems I was involved with while I was there with Sanders.

In 1978, I founded a company called Business Operating Systems (BOS) in order to apply theories I had developed about computer processing and parallel processing in particular. Over the course of the following eight years I designed a series of massively parallel, loosely

coupled computers that were distributed world-wide. In fact, I believe BOS delivered more computers of this kind than all other vendors combined at the time. The computers were so different than others that we had to design all circuit boards, several chips, and even the metal cabinetry ourselves. Major customers included General Electric, Gates Rubber, The New York Stock Exchanges, Chicago Board of Trade, and exchanges in San Francisco, London, Amsterdam, and other countries. These computers consisted of hundreds of processing elements running in parallel, constituting some of the largest computer systems ever built up to that time. We provided computers for both trading and ticker consolidation purposes. We were instrumental in getting computerized trading legalized because our computers substantially eliminated trading information latency issues. These systems were provided in conjunction with a company called Network Utilities based in Chicago, New York, and London. In 1984, Reuters acquired Network Utilities and all the computers and systems we had provided creating what is known today as Reuters Data Systems. The General Electric systems were deployed in Venezuela to support their appliance manufacturing operations and involved large scale computers deployed all over Venezuela communicating with each other in such a way that the entire system appeared as one huge distributed computer. In both cases, Reuters and GE, security was a critical issue. At Gates Rubber, BOS computers were used to integrate all industrial controls and guided vehicles in a factory where the environment was hostile to humans. BOS computers were finally replaced in 1990. During my time at BOS I filed my first patent having to do with mathematical coding techniques and data access.

In 1990, I was approached by several of the people I had met through GE in order to develop a series of products involving saving and restoring computer operation states between power failures and the like. A company called PowerCard was formed and I designed several hardware and software products, filing my second patent in the process. PowerCard products won several industry awards including PC Magazine's "product of the year" awards for both hardware and software in US and French versions of the publication. The technology was licensed to Symantic, and I was tasked with developing the flagship component of "PC Tools" for them (CPR). My understanding is that that product sold over a million copies. The next year I was retained by Symantec to produce a significantly expanded product for them based on the Windows Operating System which I understand also sold well. During my tenure with PowerCard as a director and the chief scientist, I consulted with the EPA helping to develop the

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Between 1995 and 2003, I was the co-founder, Chief Technology Officer and Chief Scientist for NeoCore, a venture funded company founded to commercialize Digital Pattern Processing, a technology I invented. NeoCore's primary product is an XML information management system called XMS, which is an entirely self-constructing database that can manage heterogeneous datasets, including unstructured and semi-structured information along with more traditional structured data types. NeoCore technology is deeply rooted in coding theory and information theory and I have nine patents issued in the field. Neocore XMS has been widely distributed here and abroad. Among the users are several government agencies (the NSA is a secure secret application, the Japanese Genome project, and more) and many commercial and academic entities (Center for Computational Biology, Cingular, Tibco, Toshiba, Canon, etc.). In late 2003, I was part of a group that reacquired all NeoCore products and intellectual property and a new company was formed called Xpriori, LLC. Currently I sit on the board of directors of the company and serve as CEO (although I am currently on leave).

My work in digital pattern processing was reviewed by Professor Steve Ward at the Massachusetts Institute of Technology and was found to do what it says "even though it sounds impossible." Digital Pattern Processing was also substantially the subject of the Kenneth Wenker (PhD) independent thesis for his graduate degree in computer science. My writings on information modeling, digital pattern processing, XML, and computer architecture have been widely published in multiple languages and have also served as materials for both undergraduate and graduate curriculums in the US and Canada. I have contributed to two books on the subject of XML, information management, and information modeling (XML Handbook, McGraw Hill; and XML Data Management: Native XML and XML-Enabled Database Systems, Addison-Wesley). I have given numerous speeches and lectures about computer architecture, XML, Information management, bioinformatics, and other subjects related to computer technology. I have given several keynote speeches including ones delivered at the IEEE annual dinner, Celebrate Technology (a Colorado technology symposium), and at the Bioinformatics Summit Council. I won the Avaition Week and Space Technology Magazine Laurel in Electronics for having invented Digital Pattern Processing. I was designated as an "Architects of the Internet" in a special issue of EE Times devoted to the twenty-four people who they felt were designing the Internet of the Future

In 1993 I began my relationship with Intellectual Property Consultants Inc. (now TAEUS) as a consultant, a relationship I have maintained to this day except for a period between early 2003 and early 2004 when I was in their full time employ. Over the course of those years, I have served as an expert in over one hundred intellectual property related cases and have evaluated hundreds of patents. I have consulted with AT&T, Bellcore, Motorola, Intel, Wang, IBM, Roche, Lear Engineering, Microsoft, Lucent, Texas Instruments (TI), Southern Bell (SBC), and many others. I have served as in expert on numerous cases involving mathematical coding theory and encryption.

# Exhibit B

#### EXHIBIT B

- 1. Complaint and Jury Demand, Dec. 20, 2004.
- 2. Answer of Defendant Game Logic, Inc., Jan. 24, 2005.
- 3. U.S. Patent No. 5,569,082 and file history.
- 4. U.S. Patent No. 5,709,603 and file history.
- 5. Plaintiff Ingenio's, Filiale de Lot-Quebec, Inc.'s Objections and Responses to Defendant GameLogic Inc 's First Set of Interrogatories (Nos. 1-6), May 9, 2005.
- 6. Defendant's GameLogic Inc. Responses to Plaintiff Ingenio's, Filiale de Lot-Quebec, Inc.'s First Set of Interrogatories (No. 2), May 16, 2005.
- 7. Defendant's GameLogic Inc. Responses to Plaintiff Ingenio's, Filiale de Lot-Quebec, Inc.'s First Set of Interrogatories (Nos. 1 & 3-16), Jun 6, 2005.
- 8. Plaintiff Ingenio's, Filiale de Lot-Quebec, Inc.'s Objections and Responses to Defendant GameLogic Inc 's First Set of Interrogatories (Nos. 1-27) [Redacted Version], May 31, 2005.
- 9. Defendant GameLogic Inc 's Opening Brief and Accompanying Exhibits in Support of its Motion for Summary Judgment of Non-Infringement, March 8, 2005.
- 10. U.S. Patent No. 5,377,975, R. Clapper Jr., "Electronic Gaming Apparatus and Method."
- 11. U.S. Patent No. 5,348,299, R. Clapper Jr., "Electronic Gaming Apparatus."
- 12. International Application Number: PCT/F190/00254, Raha-Au-Tomaattiyhdistys, "A Game for Playing Apparatus."
- 13. U.S. Patent No. 5,373,440, L. Cohen et al., "Promotional Game Method and Apparatus Therefor."
- 14. U.S. Patent No. 4,922,522, J. Scanlon, "Telecommunications Access to Lottery Systems."
- 15. U.S. Patent No. 4,494,197, S. Troy, et al., "Automatic Lottery System."
- 16. U.S. Patent No. 4,689,742, S. Troy, et al., "Automatic Lottery System."
- 17. International Application Number: PCT/US 96/03320 Search Report, Notification of Transmittal of the International Search Report or the Declaration, mailed September 5, 1996.

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- 18. "Betting on Video Lottery Terminals to Raise Revenue," House Research Report Organization, Texas House of Representatives, Focus Report, March 5, 2004.
- 19. U.S. Patent No. 5,586,937, Menasche, "Interactive, Computerised Gaming System with Remote Terminals."
- 20. U.S. Patent No. 4,882,473, Bergeron, et al., "On-line Wagering System with Programmable Game Entry Cards and Operator Security Cards."
- 21. U.S. Patent No. 4,582,324, Koza, et al., "Illusion of Skill Game Machine for a Gaming System."
- 22. Thomson, Sue, "What are the Odds?: Understanding the Risks," Powerhouse Museum, 2004.
- 23. Blumenthal, Richard, Connecticut Attorney General, Attorney General's Opinion, March 12, 2003.
- 24. U.S. Patent No. 5,042,809, Richardson, "Computerized Gaming Device."
- 25. U.S. Patent No. 4,856,787, Itkis, "Concurrent Game Network."
- 26. U.S. Patent No. 5,324,035, Morris, et al., "Video Gaming System with Fixed Pool of Winning Plays and Global Pool Access."
- 27. Garner, Bryan, ed. "Black's Law Dictionary," 8th ed., West Thomson, 2004.
- 28. Mc Kechnie, Jean, ed. "Webster's New Twentieth Century Dictionary of the English Language: Unabridged," 2<sup>nd</sup> ed., Prentice Hall Press, 1983.

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## **CERTIFICATE OF SERVICE**

I hereby certify that on the 15 day of January, 2006, a true and accurate copy of the **Expert Report Of Christopher L. Brandin.** was served by electronic mail upon to the following party:

Brian M. Buroker, Esq. Hunton & Williams LLP 1900 K Street, N.W. Suite 1200 Washington, DC 20006

7/5/06 Date/

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